



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON DC 20350 2000

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1. REPLY REFER TO

OPNAVINST 3913.2
OP-02

JUL 1 1990

OPNAV INSTRUCTION 3913.2

From: Chief of Naval Operations

Subj: RESEARCH AND DEVELOPMENT SUBMARINE PROGRAM

Ref: (a) OPNAVINST 5000.42C
(b) OPNAVINST C3000.5E (NOTAL)
(c) OPNAVINST 3960.10C

1. **Purpose.** To establish policy, procedures, and responsibilities for the direction and management of the Research and Development (R&D) Submarine Program and for utilization of the designated R&D Submarine.

2. **Background.** To enhance the development of advanced submarine technologies, an Atlantic Fleet SSN 688 Class submarine, USS MEMPHIS (SSN 691), has been assigned a primary mission to support submarine research and development (R&D). An R&D Submarine Project (Project Number S2034) has been established under the Advanced Submarine Systems Development Program (Program Element 0603561N) for the support of the R&D Submarine Program. Program management responsibilities in the Naval Sea Systems Command (NAVSEASYS COM) have been assigned to the Director, Advanced Submarine Research and Development (SEA 92R). The Attack Submarine Program Office (PMS 393) will provide support to SEA 92R for platform management. Selected developments from industry, academia, in-house Navy programs, and the Advanced Submarine Technology Program under the sponsorship of the Defense Advanced Research Projects Agency (DARPA) will be accommodated to provide for early at-sea test and evaluation of promising technologies and concepts. After appropriate design and planning, the R&D Submarine will undergo modification during a shipyard availability to provide greater flexibility to accommodate R&D projects for the duration of the ship's service life. The modifications during overhaul will be designed to enhance the ship's capability to support the broad range of technology developments envisioned for test and evaluation, including those requiring internal and external configuration changes.

3. **Scope.** This instruction applies to the actions required to carry out the R&D Submarine Program, including planning and execution of shipboard modifications, tests and trials, as well as operation and maintenance of the R&D Submarine.



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4. **Discussion.** The R&D Submarine Program is a NON-ACAT R&D Program for the exploration of submarine technology and the conduct of submarine systems integration as prescribed in paragraph 5f of reference (a). The R&D Submarine will support rapid prototyping and early evaluation of promising technologies through testing of technological and systems concepts at sea in a submarine environment. The designated R&D Submarine will serve as the primary ship for the at-sea test and evaluation of selected submarine technology developments. Other submarines or test vehicles may be assigned when the R&D Submarine is not available, or when determined to be more suitable for reasons of cost, safety, or technical requirements. A broad range of applications will be evaluated, including new operational concepts, systems, equipment, components, techniques, procedures, and technologies.

5. **Policy.** The R&D Submarine Program is established under the direction of the Program Sponsor, Assistant Chief of Naval Operations (Undersea Warfare) (OP-02). Commander Naval Sea Systems Command (COMNAVSEASYSCOM) will be responsible for program management. While the R&D Submarine has been assigned a primary mission of supporting submarine R&D, the ship will retain warfighting capabilities and readiness for wartime deployment; however it will not participate in the annual deployment cycle. The Fleet Commander will continue to exercise operational control of the R&D Submarine and will be responsible for operation and maintenance of other than R&D equipment installed under this instruction, using Fleet Operations and Maintenance, Navy (O&MN) funds. COMNAVSEASYSCOM will nominate candidate developments and plan and execute approved installations, tests, and evaluations. Recommendations for the utilization of test vehicles other than the R&D Submarine will also be coordinated with and endorsed by COMNAVSEASYSCOM. Program sponsors for individual technology developments will provide supporting plans and resources, including necessary personnel and funds for installation, test, maintenance, removal, and restoration. Appropriate logistic support, including training and technical support, will be provided by individual program sponsors. COMNAVSEASYSCOM (SEA 92) will ensure that submarine safety requirements are maintained at all times incident to the design, installation, operation, and removal of modifications and test equipment.

This instruction does not alter the responsibilities of the Director of Naval Nuclear Propulsion Program (OP-00N), as established by reference (c).

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As R&D Submarine Program Sponsor, CNO (OP-02) will exercise program approval authority for the selection of technology developments and utilization of the R&D Submarine. CNO (OP-02) will maintain continuing program oversight to ensure the achievement of program objectives.

6. **Procedures.** The selection, installation, maintenance, test, and evaluation of technology developments in the R&D Submarine will follow procedures developed by COMNAVSEASYSCOM and approved by CNO (OP-02). Coordination with technology program sponsors and other participating activities will be the responsibility of COMNAVSEASYSCOM. The individual technology program sponsors will participate with COMNAVSEASYSCOM in the identification of candidate technology developments and, after acceptance, will provide necessary support and funding. COMNAVSEASYSCOM will ensure that all technology developments selected as candidates for installation and testing show appropriate promise of providing recognizable, real, and viable improvements in the warfighting capabilities of future submarines. COMNAVSEASYSCOM will submit candidate technology programs to CNO (OP-02) for approval, including the rationale for selection, relative priorities, estimated costs, integrated plans for test and evaluation, schedules, and potential benefits and risks. Funding sources will be clearly identified and their availability will be stipulated. Configuration control will be given special emphasis, particularly in view of the number of temporary installations and modifications anticipated. Safety standards will not be compromised. DARPA, the Naval Research Laboratory (NRL), the Naval R&D Activities, and members of the academic and industrial communities may be invited to participate in the tests and evaluations where developments concern their areas of cognizance or expertise. Participation may also include representatives from the Operational Test and Evaluation Force (OPTEVFOR) when required to meet the operational test and evaluation (OT&E) requirements of paragraph 6b of reference (b). COMNAVSEASYSCOM is responsible for providing specific procedures in a separate instruction.

7. **Responsibilities**

a. The Assistant Chief of Naval Operations (Undersea Warfare) (OP-02) will serve as Program Sponsor, provide policy direction and funding support, and act as approval authority for performance under the R&D Submarine Program.

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b. The Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT) will exercise command authority over the operation and maintenance of the R&D Submarine, using Fleet O&MN funds, and participate in the test and evaluation of submarine technology developments.

c. The Commander, Naval Sea Systems Command (COMNAVSEASYS COM) will be responsible for program management of the R&D Submarine Program, to wit:

(1) Prepare and submit program plans and budgetary requirements and justifications, including long range plans and funding profiles.

(2) Prepare and implement procedures for the selection, planning, integration, and scheduling of installations and modifications for test and evaluation.

(3) Review and nominate to CNO (OP-02) on a quarterly basis candidate technology developments for test and evaluation, together with installation requirements, supporting rationale and identification of required funds, facilities, and services.

(4) Coordinate with the Director of Naval Nuclear Propulsion Program (OP-00N) (Deputy Commander, Nuclear Propulsion Directorate (SEA 08)) on all matters pertaining to or affecting nuclear propulsion.

(5) Provide for the design, systems integration, configuration control, maintenance, logistic support, training and technical support, as well as safety engineering, of installations and modifications under this program.

(6) Provide for the removal of temporary installations and the restoration of the ship to normal configuration after completion of tests and evaluations.

(7) Exercise lead responsibility for the integrated planning, preparation, systems integration, and execution of tests and evaluations of selected submarine technology developments, including coordination with all participants.

(8) Ensure that all installation and test plans adhere to applicable standards for submarine safety and, furthermore, that submarine safety standards are not compromised during execution.

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(9) Plan, prepare, and submit budgets. Provide financial management of R&D Submarine Program funds.

(10) Ensure the availability of funds required for the test and evaluation of selected developments.

(11) Provide overall coordination and direction of R&D Submarine Program activities.

(12) Exercise direct liaison with the Fleet and Submarine Force Commanders. Specific liaison shall be described in procedures discussed in 7c(2). Particular attention should be made with respect to scheduling and Type Commanders maintenance requirements.

(13) Prepare periodic R&D Submarine Program status reports and responses to higher authority as required.

d. Technology program sponsors, with cognizance over individual technology developments to undergo test and evaluation will:

(1) Participate with COMNAVSEASYSCOM in the identification of potential candidates for test and evaluation, in the R&D Submarine.

(2) Support COMNAVSEASYSCOM in the development of integrated test and evaluation plans.

(3) Retain lead responsibility for planning and implementing the test and evaluation of selected technology developments within their cognizance, under the overall management and coordination of COMNAVSEASYSCOM.

(4) Participate directly in the conduct of tests and evaluations of technology developments under their cognizance. Ensure that applicable safety standards are not compromised with respect to their developments.

(5) Provide funds for the installation, maintenance, test, evaluation, and removal of technology developments under their cognizance, as well as the prorated costs of integrated testing and ship restoration.

e. Naval R&D Activities will provide technical support, as required, for the selection, installation, test, and evaluation of submarine technology developments, and will participate directly in the test and evaluation of selected developments.

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f. OPTEVFOR will participate in the test and evaluation of selected submarine technology developments required for any operational test and evaluation (OT&E) that may be planned in accordance with reference (c).

8. **Reports.** The reporting requirements contained in this instruction are exempt from reports control by SECNAVINST 5214.2B.


D. L. COOPER
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